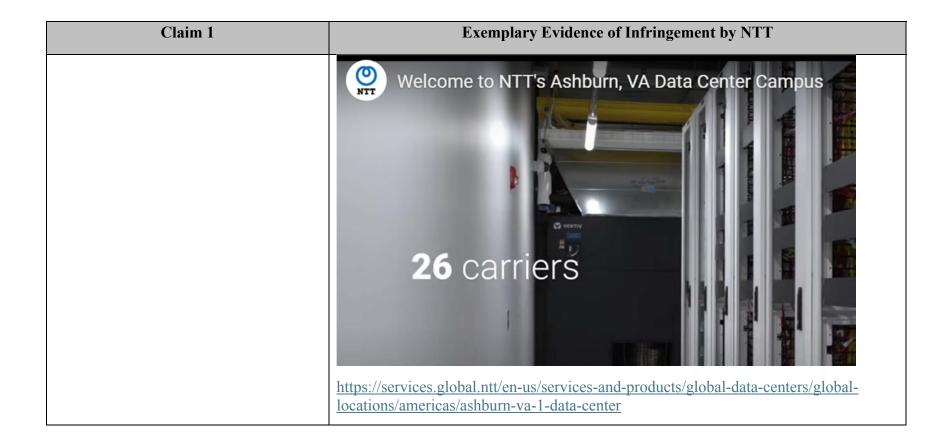
Exhibit 11

<u>U.S. Patent No. 7,031,870 – Infringement Claim Chart</u>

Claim 1	Exemplary Evidence of Infringement by NTT
[1pre] A method for evaluating one or more components in a data center, the	NTT's data centers use a method for evaluating one or more components in a data center.
method comprising:	For example, NTT uses Vigilent's cooling optimization tools in its U.S. data centers to evaluate one or more components in a data center. Vigilent uses a method for evaluating one or more components in a data center.
	Vigilent ** SEARCH GO
	Optimizing Mission Critical Cooling
	WHO WE SERVE PRODUCTS CUSTOMERS RESOURCES ABOUT
	VIGILENT AND NTT FACILITIES DEEPEN STRATEGIC
	RELATIONSHIP
	INVESTMENT STRENGTHENS DESIGN AND COOLING MANAGEMENT CHOICES FOR GLOBAL DATA CENTERS
	https://www.vigilent.com/vigilent-and-ntt-facilities-deepen-strategic-relationship/

Claim 1	Exemplary Evidence of Infringement by NTT
	NTT Communications
	Vigilent®
	 PROJECT AT-A-GLANCE NTT Communications set out to improve the overall energy efficiency of its two largest US data centers Technology from Vigilent was used to manage cooling systems more efficiently NTT managed to eliminate or power down nearly half of its existing cooling units Savings included an overall 20% reduction in cooling energy used across the two sites Other results included PUE improvements and a reduction in carbon emissions
	Representatives from NTT Facilities and Vigilent discuss the results of NTT Facilities deploying the Vigilent Dynamic Cooling Management System.
	https://www.vigilent.com/case-study-ntt-facilities-and-vigilent/

Claim 1	Exemplary Evidence of Infringement by NTT
	VIGILENT CONTINUOUSLY MATCHES COOLING OUTPUT TO HEAT LOAD
	Optimized airflow eliminates hot spots.
	Vigilent continuously optimizes the airflow in your facility, delivering improved reliability and availability. The system automatically finds and eliminates hot spots, while its comprehensive reports and tools facilitate easier operations management. Our system delivers the right amount of cooling exactly where it's needed. This typically
	results in up to a 40% reduction in carbon emissions and your cooling energy bill. We achieve that with sophisticated Al-based technology that learns your environment and adapts to change.
	https://www.vigilent.com/who-we-serve/by-facility/data-centers/
	NTT also uses Vertiv (Liebert) cooling units in the colocation data center. Liebert cooling units are controlled by Liebert's iCOM Intelligent Communication and Monitoring system.





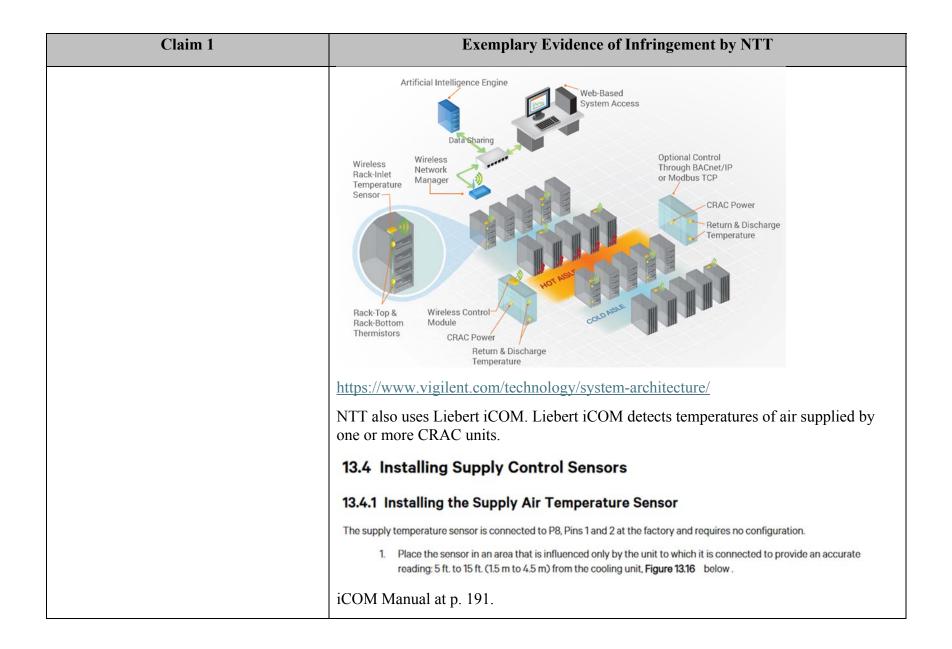
Claim 1	Exemplary Evidence of Infringement by NTT
	With scalable pre-fabricated solutions like Vertiv™ SmartMod™ and the quickly deployed Power Module, Vertiv is standardizing modular systems so you can get your data center running, faster.
	Vertiv.com
	https://issuu.com/businessreviewusa/docs/bro bc usa ragingwire data centers

Claim 1	Exemplary Evidence of Infr	ingement by NTT
	SmartMod incorporates:	
	 Modular and scalable Vertiv[™] Lie UPS power protection 	ebert®
	 Close-coupled in-row Liebert® C thermal management units with intelligent iCOM™ Edge controls 	RD
	https://www.vertiv.com/4ad535/globalassets/proc solutions/vertiv-smartmod-na-brochure_0.pdf	lucts/critical-power/integrated-
	VERTIV.	Liebert®
		iCOM™ Thermal System Controls Greater Data Center Protection, Efficiency & Insight
	https://www.vertiv.com/49d637/globalassets/sharcontrols-brochure.pdf ("iCOM Brochure").	red/liebert-icom-thermal-system-

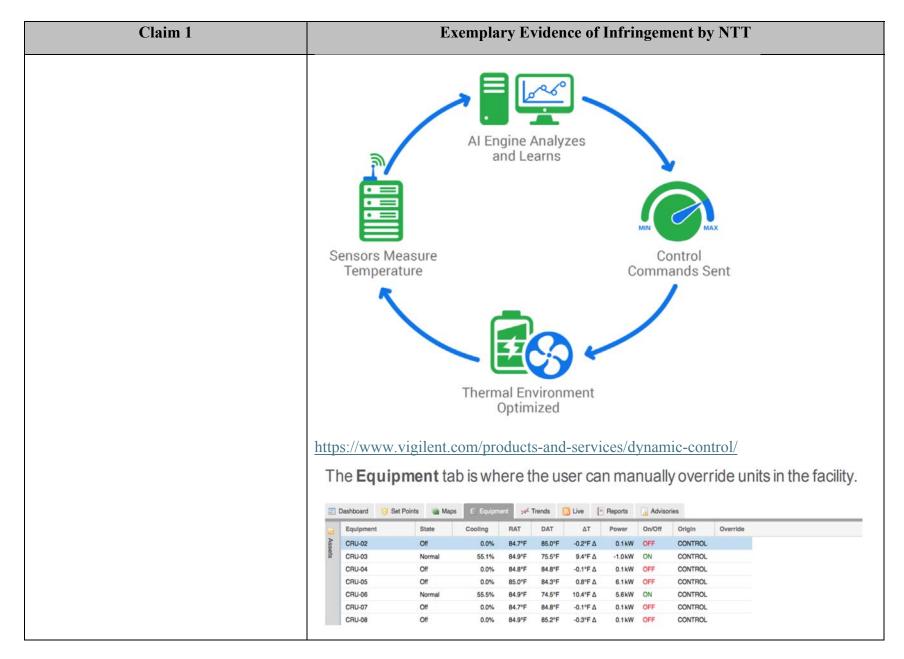
Claim 1	Exemplary Evidence of Infringement by NTT	
	At the cooling unit level, the Liebert iCOM unit control provides the highest protection available and optimal performance. Monitors 380 unit and component points to eliminate single points of failure Self-healing features avoid passing unsafe operating thresholds Highly intuitive, full-color, touch screen simplifies operations to save time and reduce human error Multiple, automated unit protection routines, including lead/lag, cascade, rapid restart, refrigerant protection and valve calibration	
	At the supervisory level, the Liebert iCOM-S system control offers a revolutionary way to harmonize and optimize thermal system performance to optimize capacity across the data center, gain quick access to actionable data, and automate system diagnostics and trending. • Advanced monitoring and at-a-glance reporting on performance metrics and trends for efficiency, capacity and adverse events • Up to 50% system efficiency gains • 30% lower deployment costs • Teamwork modes that prevent conflict between units and allow them to adapt to changes in facility and IT demand to improve efficiency and availability and reduce system wear and tear – saving more than \$10,000 per unit per year in energy costs • Simple and easy to deploy — auto-configuration to detect and configure up to 4,800 sensors, eliminating the need for custom integration to building management systems and cutting sensor deployment times in half Liebert iCOM unit control and Liebert iCOM-S system control are available for new Vertiv™ data center cooling units or as retrofits. iCOM Brochure at p. 3.	
[1a] detecting inlet and outlet temperatures of one or more heat dissipating devices;	NTT detects inlet and outlet temperatures of one or more heat dissipating devices. For example, NTT uses Vigilent's cooling optimization tools. Vigilent detects inlet outlet temperatures on server racks, which are heat dissipating devices, using sensor	

Claim 1	Exemplary Evidence of Infringement by NTT
	Artificial Intelligence Engine Web-Based System Access Wireless Network Gateway Wireless Rack-Inlet Temperature Sensor AHU Power Sensor AHU Power Sensor AHU Power Sensor
	Wireless Rack-Inlet Temperature Sensor – Wireless sensor that measures temperature at the top and bottom of the rack inlet. Rack-Top and Rack-Bottom thermistors – Attached via a cable sleeve, these are the physical monitoring points for each temperature sensor.
	Wireless sensors are typically deployed every third rack to measure the inlet air temperature every minute. The sensors have two thermis- tors, one to capture temperature at rack bottom, the other at rack top.
	https://www.vigilent.com/technology/system-architecture/
	CHECK TEMPERATURES With a few clicks, you can quickly dive down from a broad facility view into the real-time temperature data of one specific rack sensor.
	https://www.vigilent.com/who-we-serve/by-facility/data-centers/

Claim 1	Exemplary Evidence of Infringement by NTT
	NTT also uses Liebert iCOM. Liebert iCOM detects inlet and outlet temperatures at server racks using wired, remote rack sensors.
	9.4 Wired Remote Sensors
	Wired, remote, rack sensors can function as control sensors and subsequently, provide input individually at the unit level or at the system level for temperature control and teamwork functions.
	Each wired remote rack sensor has two thermistors/probes. In Individual Sensor mode, the higher temperature reading or the average temperature reading of the two probes can be used. In Unit Sensors mode, some or all of the rack sensor's temperature readings are considered for higher (maximum) or average calculation. For example, setting three sensors as control and average for unit mode, averages the three highest temperature readings.
	https://www.vertiv.com/49b8b2/globalassets/shared/liebert-icom-user-manual_sl_31075.pdf ("iCOM Manual") at p. 156.
[1b] detecting temperatures of air supplied by one or more computer room	NTT detects temperatures of air supplied by one or more computer room air conditioning (CRAC) units.
air conditioning (CRAC) units;	For example, NTT uses Vigilent's cooling optimization tools. Vigilent uses return and discharge temperature sensors that measure the return air and discharge air temperature for each cooling unit (CRAC) in a data center.
	Return and Discharge Temperature Sensors – Measures the return air and discharge air temperature for each cooling unit
	Discharge Air is the temperature of air being supplied to the facility by the cooling unit
	https://fccid.io/ANATEL/01612-15-08292/MANUAL/16006226-67DD-49FB-8873-2E15C3330211/PDF ("Vigilent Manual") at p. 6, 28.



Claim 1	Exemplary Evidence of Infringement by NTT
[1c] calculating indices of air recirculation for the one or more heat dissipating devices based upon the	NTT calculates indices of air re-circulation for the one or more heat dissipating devices based upon the detected inlet temperatures, outlet temperatures and supplied air temperatures.
detected inlet temperatures, outlet temperatures and supplied air temperatures;	For example, NTT uses Vigilent's cooling optimization tools. Vigilent calculates indices of air recirculation for racks using an AI engine based on detected inlet, outlet, and supplied air temperatures, for example by calculating cooling rates.
	Using wireless temperature sensors, the system collects granular information about the thermal environment of you ity. Temperature sensors are placed every three to four racks measuring temperature at the top and bottom of the racks measuring temperature at the top and bottom of the racks measuring temperature at the top and bottom of the racks measuring temperature.
	The Al control software uses the real-time thermal data to learn and build an airflow model of the environment. The is used to determine the optimal cooling output to ensure that the thermal environment is maintained with a minimal amount of energy.
	The software then makes active control decisions for each cooling unit. The Data Center Control section provides detail on the different control capabilities of the system. The real-time temperature monitoring provides thermal feed
	as the software begins to control the environment. This constant monitoring and control response occurs automat and dynamically to optimize your thermal environment.
	Vigilent Manual at p. 102-103.
	Wireless Rack-Inlet Temperature Sensor – Wireless sensor that measures temperature at the top and bottom of the rack inlet.
	Rack-Top and Rack-Bottom thermistors – Attached via a cable sleeve, these are the physical monitoring points for each temperature sensor.
	Return and Discharge Temperature Sensors – Measures the return air and discharge air temperature for each cooling unit
	Vigilent Manual at 6, 28.



Claim 1	Exemplary Evidence of Infringement by NTT
	The columns of this tab display:
	The Equipment.
	The State of the equipment.
	The current sensible Cooling rate in % of Design Cooling Capacity. The current sensible cooling rate is also displayed on the VX Live tab, under the 'Point' column, as ComputedCoolRate, in units of kWt (kW thermal)
	The return air temperature (RAT) of that equipment.
	The discharge air temperature (DAT) of that equipment.
	The difference in temperature (∆T) between the return and discharge air temperatures.
	Cooling rate is defined as the sensible thermal energy per unit-time calculated per the following:
	Cooling Rate [tons] = (RAT -¬ DAT) * Flow (cfm) * 1.08 / 12,000
	Cooling Rate [kWc] = (RAT-¬DAT) * Flow (cfm) * 1.08 / 12,000 * 3.516
	Vigilent Manual at p. 26, 39.
	Vigilent* Optimizing Missian Collina Cooling*
	Vigilian
	EVERYDAY TOOLS With our intuitive, at-a-glance system interface, checking the current status of your facility is always at your fingertips. CHECK TEMPERATURES With a few clicks, you can quickly dive down from a broad facility view into the real-time temperature data of one specific rack sensor. EASY TRENDING Customize data to quickly surface the information you need.
	https://www.vigilent.com/who-we-serve/by-facility/data-centers/

Claim 1	Exemplary Evidence of Infringement by NTT
	NTT also uses Liebert iCOM. Liebert iCOM calculates indices of air recirculation for server racks based on detected inlet, outlet, and supplied air temperatures.
	13.2 Installing Wired Remote Sensors
	Up to 10 remote sensor modules, installed in the monitored racks and connected to the cooling unit, provide control and reference input to iCOM and building-management systems. Using remote, rack sensors combats cooling problems related to recirculation air, uneven rack loading, and air distribution.
	iCOM Manual at p. 180.
	13.1 Return Air Temperature/Humidity Sensor
	The return temperature/humidity sensor is located in the unit return air section and is supplied on all Liebert®systems with iCOM™ controls. The assembly connects to plug connection P67 on the iCOM internal control board on all CRV systems.
	iCOM Manual at p. 179.
	13.4 Installing Supply Control Sensors
	13.4.1 Installing the Supply Air Temperature Sensor
	The supply temperature sensor is connected to P8, Pins 1 and 2 at the factory and requires no configuration.
	 Place the sensor in an area that is influenced only by the unit to which it is connected to provide an accurate reading: 5 ft. to 15 ft. (1.5 m to 4.5 m) from the cooling unit, Figure 13.16 below.
	iCOM Manual at p. 191.

Claim 1	Exemplary Evidence of Infringement by NTT
	Selects sensor that controls cooling. Values are: Supply Sensor: Temperature control is based on maintaining the temperature of the discharge air from the cooling unit. See Supply Sensors on page 158. Remote Sensor: Temperature control is based on the temperature reading(s) from wired remote/rack sensor(s). See Wired Remote Sensors on page 156. Return Sensor: Temperature control is based on maintaining the temperature of the room air. Customer input setpoint (remote alarm device) iCOM Manual at p. 25.
[1d] varying a flow field setting of air delivered to the one or more heat dissipating devices;	NTT varies a flow field setting of air delivered to the one or more heat dissipating devices. For example, NTT uses Vigilent's cooling optimization tools. Vigilent dynamically controls the cooling units by turning them on and off or adjusting fan speeds to vary flow field settings of air delivered to the server racks. Control Module As directed by the Al Engine, the control module can turn cooling units on or off, or adjust fan speeds, to ensure the perfect facility temperature using the smallest amount of energy. As those changes are implemented, the temperature sensors gather new temperature data, and the cycle continues again. https://www.vigilent.com/technology/system-architecture/
	Commands are dispatched by the system to the cooling infrastructure, where they are automatically implemented by turning equipment on or off, or adjusting fan speeds. And this cycle continues over and over, in a closed-loop, with constant adjustments every minute of every day of every year from the moment it is deployed. https://www.vigilent.com/technology/artificial-intelligence/

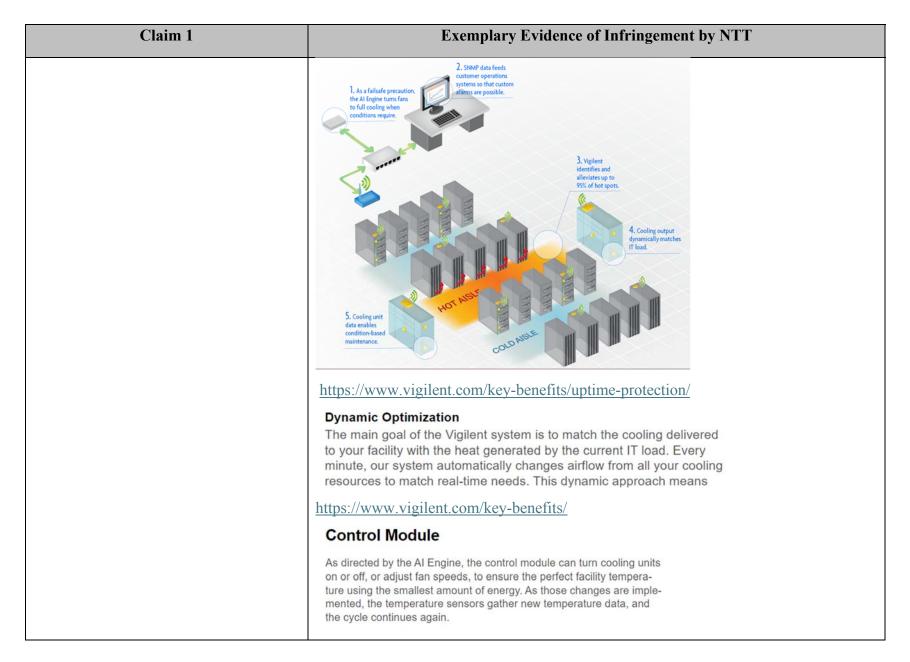
Claim 1	Exemplary Evidence of Infringement by NTT
	INTELLIGENT, CLOSED-LOOP CONTROL
	Al Engine Analyzes and Learns Sensors Measure Temperature Control Commands Sent Thermal Environment Optimized
	https://www.vigilent.com/products-and-services/dynamic-control/
	NTT also uses Liebert iCOM. Liebert iCOM varies the flow field setting of air delivered to server racks by, for example, controlling fan speed.

Claim 1	Exemplary Evidence of Infringement by NTT						
	3.1.12 Automatic Fan Speed Control						
	Temperature sensors can control fan speed using one of three modes based on the type of sensor selected as the fan-control sensor: supply, return, or remote, see Table 3.2 below. Control is based on the selected sensor for both fan control and temperature control and their setpoints as follows:						
	 Coupled: The fan control and temperature control sensor selection is the same. When coupled, fan speed is determined by the temperature setpoints. 						
	 Decoupled: The fan control and temperature control sensor selection is different. When decoupled, fan speed is determined by the fan setpoints. 						
	1	Table 3.2 Fan Speed C	ontrolling Sen	sor Options			
		-			Temperature Control Sensor Selected		
				Supply Sensor	Remote Sensor	Return Sensor	
			Supply Sensor	Coupled	N/A	N/A	
		Fan Control Sensor Selected	Remote Sensor	Decoupled (Recommended)	Coupled	N/A	
			Return Sensor	Decoupled	Decoupled	Coupled	
[1e] determining whether the indices of air re-circulation has changed in response	NTT det	Ianual at p. 45. ermines whether ow field settings.		s of air re-circula	ation has c	hanged in respon	nse to the
to the varied flow field settings; and	For exan determin	nple, NTT uses V es whether indication field settings. Fo ges based on con	vigilent's of air-roor instance	cooling optimizat ecirculation have Vigilent determinates of the changes in fan	changed i ines chang	n response to a cl ges in cooling	hange to

Claim 1	Exemplary Evidence of Infringement by NTT
	□ Dashboard 🥡 Set Points 👊 Maps 🗈 Equipment 🔀 Live 💽 Reports 🔝 Advisories
	© Bet Points
	Vigilent Manual at p. 26.

Claim 1	Exemplary Evidence of Infringement by NTT
	INTELLIGENT, CLOSED-LOOP CONTROL
	Al Engine Analyzes and Learns Sensors Measure Temperature Control Commands Sent Thermal Environment
	Optimized https://www.vigilent.com/products-and-services/dynamic-control/
	NTT also uses Liebert iCOM. Liebert iCOM determines whether the indices of air recirculation have changed in response to varied flow field settings, by for example changing the response to varying fan speeds based on the length of time temperature has deviated and the amount of deviation from the setpoint.

Claim 1	Exemplary Evidence of Infringement by NTT
	Temperature Integration Time
	Adjusts amount of cooling/heating based on the length of time the temperature has deviated from the setpoint. The time selected is the amount of time it will take cooling capacity to reach 100%. For example, if three minutes is selected, cooling capacity will increase to 100% in three minutes.
	NOTE: Three to five minutes of integration time is adequate for most applications. See Considerations when Using PI Temperature Control on page 28.
	NOTE: Only used when Temperature Control Type is PI .
	Temperature Proportional Band
	Adjusts the activation point of cooling/heating components based on deviation from setpoint by placing half of the selected value on each side of the temperature control setpoint. A smaller number causes faster reaction to temperature changes.
	NOTE: Setting this too low causes short cycling of compressors.
	iCOM Manual at p. 25.
[1f] evaluating the one or more components based upon changes in the indices of air re-circulation for the one or more heat dissipating devices at the various flow field settings.	NTT evaluates the one or more components based upon changes in the indices of air re-circulation for the one or more heat dissipating devices at the various flow field settings.
	For example, NTT uses Vigilent's cooling optimization tools. Vigilent evaluates components based on changes in the indices of air re-circulation for the server racks at various flow field settings. For instance, Vigilent evaluates the components in the data center based on changes to temperature at the different fan speed settings in a dynamic optimization, closed loop control.



Claim 1	Exemplary Evidence of Infringement by NTT
	https://www.vigilent.com/technology/system-architecture/
	INTELLIGENT, CLOSED-LOOP CONTROL
	Al Engine Analyzes and Learns Sensors Measure Temperature Control Commands Sent
	Thermal Environment Optimized
	https://www.vigilent.com/products-and-services/dynamic-control/
	Constantly adapting The AI Engine continuously adjusts cooling output as it adapts to changes in the environment, new equipment, and varying IT loads.
	https://www.vigilent.com/products-and-services/dynamic-control/
	NTT also uses Liebert iCOM. Liebert iCOM evaluates the components based on changed in the indices of air re-circulation for the server racks at various flow field settings. For example, Teamwork Mode evaluates changes in the air temperature of the
	inlet, outlet, or supply temperature of the heat dissipating devices and adjusts one or

Claim 1	Exemplary Evidence of Infringement by NTT
	more cooling units controls to provide the required cooling capacity, and Standby Mode evaluates these changes and activates/deactivates one or more cooling units to provide required cooling capacity.
	6 Teamwork, Standby and Rotation for Cooling Units
	U2U communication via private network and additional hardware (see U2U Networking on page 95) allows the following operating features for the cooling units:
	TeamworkStandby (Rotation)Cascade
	iCOM Manual at p. 99.